

US 301 Waldorf Area Transportation Improvement Project Purpose and Need Statement

Project Purpose

The purpose of this project is to: improve local traffic operation along US 301 in the Waldorf area; facilitate the safe and efficient flow of through traffic and commuter traffic between the Waldorf area and the Washington metropolitan area while providing a cost-effective and environmentally sensitive multi-modal transportation system to support existing and future travel demand, land use, and development efforts that are consistent with smart growth planning policies; and promote and secure environmental stewardship.

The US 301 Waldorf Area Transportation Improvement Project encompasses areas along US 301 (including US 301/MD 5 north of Mattawoman-Beantown Road) through the greater Waldorf area in northern Charles County and southern Prince George's County. The southern project limit includes the intersection of US 301 with Washington Avenue and Turkey Hill Road just north of La Plata. The northern limit includes the US 301/MD 5 interchange area at T.B. in southern Prince George's County which includes the intersection of US 301 and MD 381 (T.B. refers to the area in the vicinity of the MD 5 and US 301 interchange where properties owned by the Townshend and Brooke families met). The project limits were determined in coordination with the Federal Highway Administration (FHWA), based on the issues identified in the Non-Segmentation Analysis report for the US 301 and MD 5 corridors (MD SHA, 2005).

Project Needs

This project is needed to reduce the current and future problems with congestion and travel delays along US 301 while increasing mobility, improving system levels of service, and enhancing safety. The project will investigate ways to improve access management and controls to better manage the conflicting traffic types (i.e., regional through traffic versus local traffic) now using US 301. It will provide a cost-effective multimodal transportation infrastructure to serve existing and future land uses and development patterns while minimizing impacts on sensitive natural, human, and cultural environmental resources. The Maryland State Highway Administration (MD SHA) has identified the following underlying needs that the project should address:

Mobility / Current and Future Traffic Demand and Congestion

US 301 through the Waldorf area serves a variety of traffic types that can compete and conflict with one another. This highway serves as:

- a major commuter route to the Washington D.C. and Baltimore metropolitan regions,
- a "Main Thoroughfare" for the Waldorf local and regional commercial shopping and business district,
- one of only a few major gateways to and from the peninsula of the southern Maryland region along with MD 2/4, MD 5, and MD 210, and
- a regional traffic thoroughfare serving to facilitate both tourist and commercial through traffic through the region

The needs and expectations of local traffic can differ from those of through travelers and lead to conflicts. There is a need to manage the mix of traffic types currently utilizing US 301.

US 301 in the Waldorf area has experienced considerable residential, commercial, and employment growth over the past 30 years. The existing pattern of growth and development centered along US 301 has greatly contributed to the increased travel demand and congestion on US 301 through the Waldorf area. Weekday peak period delays and congestion have become particularly prevalent at some signalized intersections, with seven intersections currently operating at or over design capacity during one or both peak periods. Vehicular congestion and delays are expected to worsen with the continued growth projected in the Waldorf area and the southern Maryland region. The number of intersections along US 301 through the Waldorf area projected to operate at or over design capacity during one or both weekday peak periods is expected to more than double to seventeen by 2030.

Transit services are provided along the US 301 corridor by both Charles County and the Maryland Transit Administration (MTA). Charles County operates the VanGO bus service, which provides loop routing through the county, with several lines operating in the project area. MTA bus lines utilize park and ride facilities in Waldorf and the surrounding region and take passengers to and from the Washington D.C. area. These lots and MTA routes are often filled to capacity.

A goal of this study is to improve existing transit services and to accommodate future high-level transit. Addressing the demand for transit services throughout the project area will assist in decreasing the need for added roadway capacity. Alternatives developed for this project will provide transportation options which encourage increased use of transit. This will be accomplished by providing good access and operational capabilities for transit services, such as an adequate transit support network and accommodating the plans of multimodal transit agencies.

The heavy peak period traffic volumes, delays and congestion are not confined to US 301, but also occur on the many cross roads as they intersect with US 301. There are heavy local east-west movements within Waldorf, and all side street junctions with US 301 in Waldorf are at-grade crossings, with many controlled by traffic signals. Therefore, east-west traffic in Waldorf must cross US 301 utilizing at-grade intersections to get from one side of town to the other. High traffic volumes, delays, and congestion are not confined to weekday peak periods. During weekend traffic peak periods, especially during the summer months, tourist traffic combined with the commercial traffic in the corridor leads to heavy mid-day traffic volumes and congestion.

Many commercial businesses have access directly on US 301 resulting in numerous driveways/curb cuts on the highway, especially through the central portion of the corridor from Billingsley Road to Mattawoman-Beantown Road (MD 5). There are also numerous breaks in the median to allow left and/or U-turns at intersections and at mid-block locations. There is a need to better manage access controls along US 301 to prevent the additional friction and crash potential caused by the mixing of heavy mainline through traffic volumes with turning and cross traffic accessing the many driveways and cross streets on the highway.

The LaPlata area, although not directly within the Project Study Limits, was identified in the 1993-1996 US 301 Task Force report as an area where measures should be initiated to improve safety and traffic flow. The Task Force report also emphasized that further study should be carried out to provide for a potential limited access roadway in this area. To ensure that future transportation options within the LaPlata area are protected SHA is committed to continuing an aggressive access management approach to limit access points and preserve right-of-way along US 301 as part of the Secondary and Cumulative Effects (SCEA) analysis for this Waldorf Area Project. SHA will work with the local jurisdictions as closely as possible to embark on and carry out the access management approach. SHA also will use its existing statutory authorities and regulatory controls to implement access management and to preserve right-of-way along US 301.

Safety

None of the roadway sections studied along US 301 exhibit total crash rates that are significantly higher than the average statewide rates. However, four out of the five studied sections between Turkey Hill Road/Washington Avenue in the south and the US 301/MD 5 interchange in T.B. to the north, did have *individual* crash types that are significantly higher than statewide rates. Three of the sections have rear end crash rates that are significantly high, and two sections had truck related crash rates that are also significantly high. The section just south of the US 301/MD 5 interchange at T.B. has four crash types that are significantly high, and currently also has a high concentration of congested intersections, the highest traffic volumes in the corridor, and eight of the 11 fatal crashes recorded for the study period. The high incidences of specific crash types within the US 301 Waldorf project area are likely due to the combination of congested conditions, frequent driveway and at-grade intersection access points and median crossovers, combined with high through volumes mixed with cross street and turning traffic volumes. The need to better accommodate and facilitate safe pedestrian and bicycle crossings of, and travel along, US 301 through the Waldorf area has also been identified in local planning studies (Waldorf Sub-Area Plan, Charles County, 2004).

Support Existing and Future Local, Regional, and State Land Use and Development Patterns Consistent with Maryland's Smart Growth Policy

Over the past 30 years (between 1970 and 2000), the population of the southern Maryland region, which includes Charles, Calvert and St. Mary's Counties, has grown faster in terms of the percentage of growth (143 %) than any other region in Maryland, with much of that increase occurring in the Waldorf area. This area is expected to continue to increase in population at a relatively high rate for the next several decades as well, with the southern Maryland region forecasted to again grow faster than any other region in Maryland (65% from 2000 to 2030).

The rate at which the Waldorf area has experienced residential, commercial, and employment growth in recent years, along with the existing geographic pattern of the development, has greatly contributed to the increased travel demand and congestion on the area roadways, including US 301. Much of the commercial and employment development in Waldorf is centered along US 301, with much of the traffic generated by those businesses needing to use US 301 for access. Much of the working population in Waldorf and southern Maryland must also use US 301 to reach jobs that are located outside of the County, as the transportation alternatives to leave Charles County are limited to a few major facilities such as US 301. This pattern of growth and development will continue to contribute to even greater future traffic volumes and travel demand on the area transportation network.

Locally, Charles County has designated the Waldorf area as an area where more intensive development is being encouraged, with the recently approved County Comprehensive Plan calling for a Western Bypass of US 301 in addition to short term upgrades of existing US 301. Within Prince George's County, the Brandywine area, which is situated between the Charles County line and the US 301/MD 5 interchange at T.B., is also targeted for future commercial, industrial, and residential growth. Prince George's County's Sub-region V Master Plan also recommends improvements to existing US 301 as well as designates an alignment for a Western Bypass of US 301 in this area.

From a statewide planning perspective, much of the land adjacent to US 301 through the project area is within or adjacent to Priority Funding Areas (PFAs), as both the Waldorf and Brandywine areas are designated as PFAs. Multimodal transportation improvements along US 301 through Waldorf are needed to support the local, regional, and statewide land use planning and development patterns for the area.

Homeland Security

US 301 is a major route providing connectivity between military bases and is a major evacuation route serving the Washington, DC metropolitan area. The improvements to this roadway will enhance the ability to reach military bases and evacuate the Washington, DC metropolitan area in the event of an emergency.

Environmental Stewardship

While future land use plans call for continued development along US 301 in the Waldorf area in both Prince George's and Charles Counties, both counties and the state of Maryland highly value environmental stewardship and resource protection. The Waldorf area contains a variety of sensitive natural, cultural and community/human environment resources, such as Mattawoman Creek, Zekiah Swamp, historic properties near T.B. and throughout Waldorf, and a variety of parks, schools, and community facilities that warrant protection and/or preservation. As a major public works project, potential multimodal transportation solutions need to be located, designed, and implemented with full consideration of important environmental resources within the study area, while ensuring that planned development locations (such as PFAs) are adequately serviced.

Environmental stewardship is an approach to the planning and development of the U.S. 301 Waldorf Area Transportation Improvement Project which seeks to maximize the enhancement, protection, and improvement of natural, community and cultural resources. Environmental stewardship represents an opportunity to improve the present environmental conditions by leaving them in better shape than existed prior to the implementation of the project. It is a non-regulatory program, meaning that it is not associated with compensatory mitigation required to offset direct impacts to resources affected by the project. Environmental stewardship actions are provided above and beyond, not instead of, required regulatory mitigation. The type, quantity and location of environmental stewardship measures are determined on a project-specific basis after the formulation of priority stewardship needs through a coordinated watershed approach within the study area through consultation with project partners and a variety of public stakeholders. Examples of potential environmental stewardship opportunities include:

- enhancement of degraded wetland resources;
- conservation/preservation of high quality ecological resources;
- stream restoration actions;
- water quality improvements;
- preservation and protection of culturally significant sites; and
- improved public recreational facilities within the study area.

Conclusions

There are a variety of transportation and growth related issues present along US 301 in the vicinity of Waldorf which lead to the overall need for this project to improve multimodal traffic movement, flow, and safety through the area. Existing and increasing traffic volumes and congestion along US 301, combined with poor safety statistics for several crash categories, are threatening to prevent this highway from effectively fulfilling the multiple functions it now must perform of providing local access and through traffic capacity. The current design of US 301, with its numerous at-grade intersections and driveway access points, will not allow it to keep up with the population and employment growth anticipated and planned throughout the southern Maryland region. Investment in cost-effective multimodal transportation improvement options for US 301 in and around Waldorf, which incorporate environmental stewardship techniques and philosophy, will assist in allowing this growth to occur within planned locations by providing the necessary transportation infrastructure to maintain it while enhancing the area's living environment.